

TRANSLATION

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2003P12514WO	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/EP2004/052581	International filing date (<i>day/month/year</i>) 20.10.2004	Priority date (<i>day/month/year</i>) 31.10.2003
International Patent Classification (IPC) or national classification and IPC H04L12/56		
Applicant SIEMENS AKTIENGESELLSCHAFT		

1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.	
2.	This REPORT consists of a total of 4 sheets, including this cover sheet.	
3.	This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of 10 sheets, as follows: <div><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</div> b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).	
4.	This report contains indications relating to the following items: <div><input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application</div>	

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/052581

Box No. I

Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1, 2, 4, 5, 7-10, 12-21 as originally filed/furnished
- pages* 3, 3a, 6, 11, 11a received by this Authority on 15.03.2005 with letter of 14.03.2005
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* 1-10 received by this Authority on 15.03.2005 with letter of 14.03.2005
- nos.* _____ received by this Authority on _____
- ☒ the drawings:
- sheets 1/2, 2/2 as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☒ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☒ the claims, nos. 11
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-10	YES
	Claims		NO
Inventive step (IS)	Claims	1-10	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-10	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
<p>Claim 1 relates to a process for determining a route between a first radio station and a second radio station (mobile station) via other radio stations, in which process a radio device (base station) which knows the neighbourhood relationships between the radio stations determines some of the radio stations in the route and sends information on these radio stations to one or more radio stations among these radio stations. After receiving this information, the radio stations determine the remaining radio stations in the route.</p> <p>This type of process, in which the radio device determines only parts of the route, rather than the entire route between the first and the second radio stations, and in which the radio stations themselves determine the remaining route, cannot be found in the available documents, nor is it suggested by these documents, either alone or in combination.</p> <p>In the known document D1, by YU-CHING HSU <i>et alia</i>, "Base-centric routing protocol for multihop cellular networks", which represents the closest prior art, the route is either entirely determined by the radio device, in</p>			

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Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

accordance with a centralised route determination process, or is entirely determined by the radio stations, in accordance with a decentralised route determination process. D1 does not suggest mixing the centralised and the decentralised route determination processes.

The subject matter of claim 1 should therefore be considered novel and inventive (PCT Article 33(2) and 33(3)). The subject matter of claim 1 is also industrially applicable.

The above reasoned statement likewise applies to **independent claim 10**, which defines a radio device specially designed for carrying out the process as per claim 1. Claim 10 thus likewise meets all the requirements of PCT Article 33.

Dependent claims 2-9 contain advantageous developments of the subject matter of claim 1 and thus likewise meet all the requirements for novelty, inventive step and industrial applicability.